



**ENERGY SAVINGS
EXPERT TEAMS**

Leading by example,
saving energy and
taxpayer dollars in
federal facilities

ESET teams provide the following services:

- Assess operational energy efficiency measures, focusing on low-cost and no-cost measures
- Evaluate on-site generation to address vulnerability and/or reliability concerns
- Identify other relevant FEMP support services
- Identify public benefit funds available for recommended improvements and help agencies file applications for these funds
- Provide a summary assessment of long-term efficiency opportunities
- Work with site personnel to develop an implementation plan.



U.S. Department of Energy
**Energy Efficiency
and Renewable Energy**

Bringing you a prosperous future where energy
is clean, abundant, reliable, and affordable

Energy Savings Expert Teams Assessments

Energy Savings Expert Teams (ESETs)—one of a number of FEMP assessment and audit services—target federal facilities experiencing electricity or natural gas price volatility and supply shortages. ESET teams, formerly ALERT [Assessment of Load and Energy Reduction Techniques]), are ready to work with federal sites across the country to quickly set in motion energy-efficient operating strategies, particularly during times of energy shortages and price spikes.

Working with site staff, ESET teams identify and, when feasible, assist with implementing energy-saving measures. The teams focus on identifying no-cost and low-cost energy saving measures and conduct a limited assessment of distributed generation opportunities.

ENERGY AWARENESS- AT WORK *and* AT HOME

Our nation can benefit from the wise use of energy at federal facilities. As the single largest domestic user of energy, the federal government spends more than \$9 billion to power its vehicles, operations, and approximately 500,000 facilities throughout the United States. Efficient energy management at federal facilities:

- **Saves taxpayer dollars**
- **Reduces greenhouse gas emissions**
- **Protects the environment and natural resources**
- **Contributes to our national security**

The electricity used by common office equipment--computers, monitors, printers, copiers, and fax machines--is a significant portion of the electricity used in federal facilities. Reducing the amount of electricity used can be achieved by following the steps on the **Smart Energy Choices at the Office** checklist.

To help save energy and resources at home and in federal facilities, check out the helpful suggestions on the other side of this document.



SMART ENERGY CHOICES AT THE OFFICE

- Always use Compact Fluorescent Lights (CFLs) in desk lamps as opposed to incandescent lights
- Switch off all unnecessary lights
- Use natural lighting when possible
- When working late, use task lighting to directly illuminate work areas
- Unplug equipment that drains energy even when not in use (i.e., cell phone chargers, fans, coffee makers, desktop printers, radios, etc.)
- If possible, turn off your office equipment and or computer monitors at the end of the work day
- Use efficient ENERGY STAR® products
- Close or tilt window blinds to block direct sunlight to reduce cooling needs during warm months
- Photocopy only what you need
- Always use the second side of paper, either by printing on both sides or using the blank side as scrap paper



SMART ENERGY CHOICES FOR FEDERAL FACILITIES

FOR YOUR BUILDINGS

- Check/adjust combustion efficiency of gas-fired equipment
- Lower thermostat settings
- Lower setback temperatures
- Optimize morning warmup and night setback controls
- Reduce/eliminate major sources of infiltration
- Minimize use of outside air for process ventilation
- Modify work activities
- Minimize the use of gas-fired refrigeration equipment



IN CENTRAL HEATING PLANTS

- Conduct boiler efficiency tests
- Optimize combustion efficiency
- Perform boiler maintenance
- Minimize boiler blowdown
- Optimize steam plant heat balance
- Minimize deaerator steam venting
- Optimize boiler loading

WITH THERMAL DISTRIBUTION

- Inspect/replace steam traps
- Inspect/repair condensate return equipment
- Locate/repair steam leaks
- Repair insulation
- Isolate non-essential distribution piping
- Reduce distribution pressure

SMART ENERGY CHOICES AT HOME

TODAY

- Turn down the temperature of your water heater to the warm setting (120°F). You'll not only save energy, you'll avoid scalding your hands.
- Check if your water heater has an insulating blanket.
- If you have a waterbed, make your bed today. The covers will insulate it, and save up to one-third of the energy it uses.
- Use energy-saving settings on refrigerators, dish washers, washing machines, and clothes dryers.
- Replace your incandescent lights with compact fluorescents.
- Check the age and condition of your major appliances, especially the refrigerator. You may want to replace it with a more energy-efficient model.
- Clean or replace furnace, air-conditioner, and heat-pump filters.

THIS WEEK

- Visit the hardware store. Buy a water-heater blanket, low-flow showerheads, faucet aerators, and compact fluorescents, as needed.
- Rope caulk leaky windows.
- Assess your heating and cooling systems. Determine if replacements are justified, or whether you should retrofit them to make them work more efficiently.

THIS MONTH

- Collect your utility bills. Separate electricity and fuel bills. Target the biggest bill for energy conservation remedies.
- Crawl into your attic or crawlspace and inspect for insulation. Is there any? How much?
- Insulate hot water pipes and ducts wherever they run through unheated areas.



- Seal up the largest air leaks in your house. The worst culprits are usually not windows and doors, but utility cut-throughs for pipes ("plumping penetrations"), gaps around chimneys and recessed lights in insulated ceilings, and unfinished spaces behind cupboards and closets. Hire an energy auditor with a blower door to point out where the worst cracks are.
- Install a clock thermostat to set your thermostat back automatically at night.
- Schedule an energy audit.

THIS YEAR

- Insulate. If your walls aren't insulated have an insulation contractor blow cellulose into the walls.
- Replace aging, inefficient appliances. Replacing it with a top-efficiency model is generally a good investment.
- Upgrade leaky windows. It may be time to replace them with energy-efficient models or to boost their efficiency with weatherstripping and storm windows.
- Reduce your air conditioning costs by planting shade trees and shrubs around your house—especially on the west side.

YOU CAN MAKE A DIFFERENCE!

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.



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